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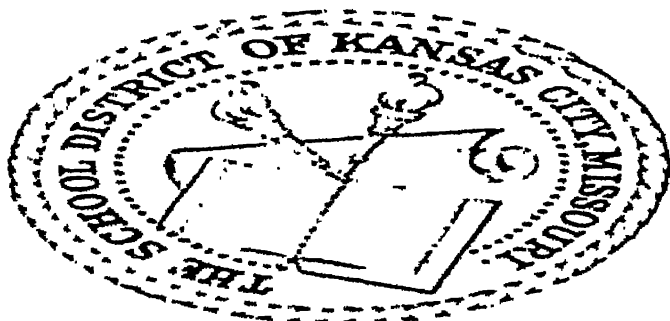


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INDUSTRIAL ARTS INDEX

THIRD ANNUAL CUMULATION

SUBJECT INDEX TO A SELECTED LIST OF ENGINEERING
AND TRADE PERIODICALS FOR 1915

EDITED BY

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With this issue the Industrial Arts Index completes its third year. Although it is the annual volume for 1915 it indexes most of the magazines for December 1914 and only a few for December 1915. The Proceedings of the American Gas Institute, Journal of the Boston Society of Civil Engineers, Journal of the Institution of Electrical Engineers and The University of Minnesota Studies in Engineering have been added this year.

There have been many suggestions for further additions to the list of periodicals indexed. Among these are the Bulletin of the American Railway Engineering Association; Canadian Mining Institute Quarterly Bulletin; Gas Age; Gas World (London); Journal of Electricity, Power and Gas; Journal of Gas Lighting (London); London Times (Engineering Supplement); Mining and Engineering World; Mining Press; Proceedings of the Electric Light Association; Printer's Ink; Printing Art; Bulletin of the Society of Automobile Engineers; Technology Monthly and Harvard Engineering Journal; American Lumberman.

Any of our subscribers who may be interested in having one or more of these periodicals indexed are asked to send us their votes. Any suggestions as to other additions or improvements will also be carefully considered.

There are several other periodicals which would be indexed in the Industrial Arts Index if the publishers were willing to furnish us copies for the purpose. It is for this reason that Ice and Refrigeration, Electric Journal, American Machinist, and Proceedings of the American Society of Civil Engineers are not included.

National Preparedness and Military Training

A new aid to the many who are discussing "preparedness" is the Abridged Debaters' Handbook on military training, just published by The H. W. Wilson Company (25c.). This covers the question of military training in schools and colleges, gives a list of organizations working for or against national defense, a brief, six pages of bibliography, and fifty-five pages of excerpts on both sides of the question. National Defense, one of the titles in the Debaters' Handbook series, price \$1.00, should be used to supplement the one on military training, if fuller information as to the present strength of our national defenses is desired.

A larger handbook on military training, in the regular series, will be issued as soon as the amount of valuable new material seems to warrant it. This handbook will include the question of compulsory military service.

Notes and Announcements

The Civil Engineers' Society of St. Paul began in November the publication of a monthly bulletin. This publication "is for the purpose of giving to the society an organ through which it may advocate a better understanding of the engineering profession in relation to the public welfare."

The Journal of the Association of Engineering Societies will be discontinued with the December, 1915, issue, owing to the disbanding of the Association on December 31, 1915. The Engineers' Club of St. Louis, the largest society in the Association and its active head for the past two years, will begin the publication of a bi-monthly journal to be known as the Journal of the Engineers' Club of St. Louis.

The Associated Technical Men, an association formed in 1914 for the purpose of furthering the interests of technical men, has commenced the publication of a monthly bul-

NOTES AND ANNOUNCEMENTS

letin to keep all members of the society informed as to its progress and to acquaint non-members with the work it is doing. A. M. Wolf, 180 North Dearborn Street, Chicago, is editor of the publication.

The first number of the Utilities Magazine was published in July, 1915. This is the official organ of the Utilities Bureau, which grew out of the conference of American mayors on public policies as to municipal utilities, held in Philadelphia, in November, 1914. In November, 1915, a Valuation Conference under the auspices of this bureau was held in Philadelphia, seven sessions being held. The proceedings of the conference will be made available in the January issue of the Utilities Magazine.

The Rhode Island Highway News, the first number of which was issued in September, 1915, is a publication of the State Board of Public Roads, and is similar to those which are issued by the highway authorities of several other states. It contains short articles on the maintenance of bituminous macadam and water bound macadam roads, a description of the business methods in the office of the board and discussions of various phases of construction and maintenance work.

There were no numbers of the Journal of the Institution of Electrical Engineers published between the issues of June 15 and Dec. 1.

The first issue of the new quarterly Bulletin of the National District Heating Association has made its appearance, being dated October, 1915. The bulletin is of standard magazine size. Under the committee heading, it is stated that the station operating committee will take up, among other things, the subjects of (1) oil as a fuel; (2) bleeder type of turbo-generator, and (3) operating data relative to a certain heating plant on which accurate information will be obtained by the committee through tests made by one of the member companies.

The Textile World Record, published by the Lord & Nagle Company, and the Textile Man-

ufacturers Journal, published by J. H. Bragdon & Company, have been consolidated to form a new publication known as the Textile World Journal. This is issued weekly, combining the news and market report features, which have been a specialty of the Textile Manufacturers Journal, and the technical machinery and special features of the Textile World Record. The Bragdon, Lord & Nagle Company, Incorporated, publish the Textile World Journal at their publication office, 377 Broadway, New York.

The Railway Electrical Engineer, which has been published by the Wray Publishing Company, at Chicago, has been bought by the Simmons-Boardman Publishing Company, the publisher of the Railway Age Gazette, and the Signal Engineer. Beginning with November it will be published by the Simmons-Boardman Publishing Company from its New York office. It will not be consolidated with any of the other periodicals of this company, but will be continued as a separate monthly publication.

The Colliery Engineer, formerly published by the International Textbook Company, at Scranton, Pennsylvania, has been purchased by the Hill Publishing Company, and was consolidated with the Coal Age in November. The latter periodical will be added to the list of those indexed in the Industrial Arts Index.

Among the magazines suggested for indexing in the Industrial Arts Index is the Mining and Engineering World, published in Chicago. The weekly issues of this magazine contain the titles of articles on mining, metallurgy and geology appearing in American and foreign periodicals. These are cumulated in semi-annual volumes, and published as the Mining World Index of Current Literature. Some four hundred periodicals are indexed, also publications of schools, societies, and government bureaus, and new books. The index has a classified arrangement, and, in many cases, a brief annotation follows the title. The seventh volume, covering January to June, 1915, has recently been published.

List of Periodicals Indexed

- Am Chem Soc J**—Journal of the American Chemical Society. \$6. Charles L. Parsons, sec., Box 505, Washington, D. C.
- Am Eng**—American Engineer. See Ry Age (Mech ed).
- Am For**—American Forestry. \$3; single numbers 25c. American Forestry Assn., 1410 H St, N. W., Washington, D. C.
- Am Gas Inst Pro**—Proceedings of the American Gas Institute, ninth annual meeting, 1914. \$7.50 to libraries. American Gas Institute, 29 W 39th St, New York.
- Am Gas Light J**—American Gas Light Journal. \$3; single numbers 10c. American Gas Light Journal, 42 Pine St, New York.
- Am Ind**—American Industries. \$1; single numbers 10c. National Manufacturers Co., 30 Church St, New York.
- Am Inst Arch J**—Journal of the American Institute of Architects. \$5; single numbers 50c. American Institute of Architects, The Octagon, Washington, D. C.
- Am Inst E E Pro**—American Institute of Electrical Engineers. Proceedings. \$10; single numbers \$1. F. L. Hutchinson, sec., 33 W 39th St, New York.
- Am Inst Min E Bul**—Bulletin of the American Institute of Mining Engineers. subs. \$10; single numbers \$1; to members, public libraries, and educational institutions, \$5; single numbers 50c. B. Stoughton, sec., 29 W 39th St, New York.
- Am Soc Heat & V E**—Transactions of the American Society of Heating and Ventilating Engineers. American Society of Heating and Ventilating Engineers, 29 W 39th St, New York.
- Am Soc M E J**—Journal of the American Society of Mechanical Engineers. \$3; single numbers 35c. American Society of Mechanical Engineers, 29 W 39th St, New York.
- Am Water Works Assn J**—Journal of the American Water Works Association. American Water Works Assn., 2410 Greenmount Av, Baltimore, Md.
- Arch & Bldg**—Architecture and Building. \$2; single numbers 30c. William T. Comstock Co., 23 Warren St, New York.
- Arch Rec**—Architectural Record. \$3; single numbers 35c. Architectural Record Co., 115 W 40th St, New York.
- Assn Eng Soc J**—Journal of the Association of Engineering Societies. \$3; single numbers 30c. Association of Engineering Societies, J. W. Peters, sec., 3817 Olive St, St. Louis, Mo.
- Automobile**—Automobile. \$3; single numbers 10c. Glass Journal Co., 231 W 39th St, New York.
- Bldg Age**—Building Age. \$2; single numbers 30c. David Williams Co., 239 W 39th St, New York.
- Boston Soc C E J**—Journal of the Boston Society of Civil Engineers. \$4 (ten numbers); single numbers 50c. Boston Society of Civil Engineers, 715 Tremont Temple, Boston.
- Brickb**—Brickbuilder. \$5; single numbers 50c. Rogers & Manson Co., 85 Water St, Boston.
- Colliery**—Colliery Engineer. \$2; single numbers 25c. Hill Pub Co., 10th Av at 36th St, New York.
- Consolidated with Coal Age on Nov. 8.
- Concrete Cem**—Concrete-Cement Age. \$1.50; single numbers 15c. Concrete-Cement Age Pub. Co., 97 West Fort St, Detroit, Mich.
- Dom Eng**—Domestic Engineering. \$2; single numbers 10c. Domestic Engineering Co., 445-447 Plymouth Court, Chicago.
- Econ Geol**—Economic Geology. \$3; single numbers 50c. Economic Geology Pub. Co., 41 North Queen St, Lancaster, Pa.
- Elec Ry J**—Electric Railway Journal. \$3; single numbers 10c. McGraw Pub. Co., 239 W 39th St, New York.
- Elec R & W Elec'n**—Electrical Review and Western Electrician. \$3; single numbers 10c. Electrical Review Pub. Co., 608 S Dearborn St, Chicago.
- Elec W**—Electrical World. \$3 single numbers 10c. McGraw Pub Co., 239 W. 39th St, New York.
- Engineer**—Engineer. Thick paper ed \$2 6d; Canadian subs \$1 18s; thin paper ed \$1 18s; Canadian subs \$1 11s 6d. Engineer, 33 Norfolk St, Strand, London, W. C.
- Eng & Contr**—Engineering and Contracting. \$2. Myron C. Clark Pub. Co., 608 S Dearborn St, Chicago.
- Eng & Min J**—Engineering and Mining Journal. \$5; single numbers 15c. Hill Pub. Co., 10th Av at 36th St, New York.
- Eng M**—Engineering Magazine. \$3; single numbers 25c. Engineering Magazine Co., 140 Nassau St, New York.
- Eng N**—Engineering News. \$5; single numbers 15c. Hill Pub. Co., 10th Av at 36th St, New York.
- Eng Rec**—Engineering Record. \$3; single numbers 10c. McGraw Pub. Co., 239 W 39th St, New York.
- Eng Soc W Pa**—Proceedings of the Engineers' Society of Western Pennsylvania. \$5; single numbers 50c. Engineers' Society of Western Pennsylvania, 2511 Oliver Bldg, Pittsburgh, Pa.
- Foundry**—Foundry. \$1; single numbers 15c. Penton Pub. Co., Penton Bldg, Cleveland, O.
- Gen Elec R**—General Electric Review. \$2; single numbers 20c. General Electric Co., Schenectady, N. Y.
- Good Roads n s**—Good Roads new series. \$2; single numbers 5c except first numbers of each month 10c. E. L. Powers Co., 180 Nassau St, New York.
- Heat & Ven**—Heating and Ventilating Magazine. \$1; single numbers 10c. Heating & Ventilating Magazine Co., 1123 Broadway, New York.
- Horseless Age**—Horseless Age. \$2; single numbers 10c. Horseless Age Co., 440 4th Av, New York.
- Ill U Eng Exp Sta Bul**—Illinois University Engineering Experiment Station. Bulletin. Univ. of Ill., Urbana.
- Illum Engr**—Illuminating Engineer. 10s 6d; single numbers 1s. Illuminating Engineering Pub. Co., 32 Victoria St, London, S. W.
- Illum Eng Soc**—Transactions of the Illuminating Engineering Society. \$5; single numbers 75c. Illuminating Engineering Soc., 29 W 39th St, New York.
- Ind Eng**—Industrial Engineering and Engineering Digest. \$2; single numbers 20c. Technical Literature Co., 120 W 32d St, New York.
- Inland Prt**—Inland Printer. \$3; single numbers 30c. Inland Printer Co., 632 Sherman St, Chicago.
- Inst E E J**—Journal of the Institution of Electrical Engineers. single numbers 3s 6d. 1s. & R. N. Spon, Ltd., 57 Haymarket, London, E. W.; Spon & Chamberlain, 133 Liberty St, New York.
- Int Marine Eng**—International Marine Engineering. \$2. Aldrich Pub. Co., 17 Battery Place, New York.
- Iron Age**—Iron Age. \$5; single numbers 20c. David Williams Co., 239 W 39th St, New York.
- Iron Tr R**—Iron Trade Review. \$4; single numbers 15c. Penton Pub. Co., Penton Bldg., Cleveland, O.

LIST OF PERIODICALS INDEXED

- J Account**—Journal of Accountancy. \$3; single numbers 30c. Ronald Press Co., 20 Vesey St, New York.
- J Fr Inst**—Journal of the Franklin Institute. \$5; single numbers 50c. Franklin Institute, Philadelphia.
- J Ind & Eng Chem**—Journal of Industrial and Engineering Chemistry. \$6. American Chemical Society, Easton, Pa.
- Locomotive**—Locomotive. 50c; single numbers gratis; recent bound volumes \$1. Hartford Steam Boiler Inspection & Insurance Co., Hartford, Conn.
- Mach**—Machinery. Engineering edition \$2; coated pa. \$2.50; single numbers 20c. Industrial Press, 140 Lafayette St, New York.
- Met & Chem Eng**—Metallurgical and Chemical Engineering. \$3; single numbers 25c. McGraw Pub. Co., 239 W 39th St, New York.
- Metal Ind n s**—Metal Industry new series. \$1; single numbers 10c. Metal Industry, 99 John St, New York.
- Metal Work**—Metal Worker, Plumber & Steam Fitter. \$2; single numbers 10c. David Williams Co., 239 W 39th St, New York.
- Minn U Bul**—University of Minnesota. Studies in engineering. Univ. of Minn., Minneapolis.
- Munic Eng**—Municipal Engineering. \$2; single numbers 25c. Engineering Pub. Co., 702 Wabash Bldg, Indianapolis, Ind.
- Munic J**—Municipal Journal. \$3; single numbers 10c; special numbers 25c. Municipal Journal and Engineer, Inc., 59 Union Square, New York.
- Power**—Power. \$2; single numbers 5c. Hill Pub. Co., 10th Av at 36th St, New York.
- Ry Age**—Railway Age Gazette. \$5; single numbers 15c. Simmons-Boardman Pub. Co., Woolworth Bldg, New York.
- Ry Age (Mech ed)**—Railway Age Gazette, mechanical edition including the American Engineer. \$2; single numbers 20c. Simmons-Boardman Pub. Co., Woolworth Bldg, New York.
- Ry R**—Railway Review. \$1; single numbers 15c. Railway Review, 1407 Ellsworth Bldg, Chicago; 50 Church St, New York.
Formerly Railway and Engineering Review.
- Sch Mines Q**—School of Mines Quarterly. \$1.50; single numbers 50c. School of Mines Quarterly, Columbia University, New York.
- Sci Am**—Scientific American. \$3; single numbers 10c. Munn & Co., 361 Broadway, New York.
- Sci Am S**—Scientific American Supplement. \$5; single numbers 10c. Munn & Co., 361 Broadway, New York.
- Sibley J**—Sibley Journal of Engineering. \$2; single numbers 25c. Sibley College, Cornell Univ., Ithaca, N. Y.
- Stevens Ind**—Stevens Indicator. \$1.50; single numbers 50c. Stevens Institute of Technology, Hoboken, N. J.
- Textile World**—Textile World Journal. \$3. Braddon, Lord & Nagle Co., 377 Broadway, New York.
Formerly published as Textile World Record, monthly at \$2.
- U S Agric Bul**—United States. Dept. of Agriculture. Bulletin. Distributed free of charge. U. S. Dept. of Agriculture, Division of Publications, Washington, D. C.
Contributions from the Bureau of Chemistry, Forest Service and Office of Public Roads are indexed.
- U S Bur For & Dom Com**—United States. Bureau of Foreign and Domestic Commerce. Special agents series. U. S. Bureau of Foreign and Domestic Commerce, Washington, D. C.
- U S Bur Mines Bul**—United States. Bureau of Mines. Bulletin. Distributed free of charge. U. S. Bureau of Mines, Washington, D. C.
- U S Bur Mines Circ**—United States. Bureau of Mines. Mines circular. U. S. Bureau of Mines, Washington, D. C.
- U S Bur Mines Tech Pa**—United States. Bureau of Mines. Technical paper. U. S. Bureau of Mines, Washington, D. C.
- U S Bur Stand Bul**—United States. Bureau of Standards. Bulletin. Gratis to educational and scientific institutions and to government depositories. U. S. Bureau of Standards, Washington, D. C.
Sold to individuals by the Superintendent of Documents. \$1; single numbers 25c.
- U S Bur Stand Circ**—United States. Bureau of Standards. Circular. U. S. Bureau of Standards, Washington, D. C.
- U S Bur Stand Tech Pa**—United States. Bureau of Standards. Technologic paper. U. S. Bureau of Standards, Washington, D. C.
- U S Sp Cons Rep**—United States. Special consular reports. U. S. Bureau of Foreign and Domestic Commerce, Washington, D. C.
- W Soc E J**—Journal of the Western Society of Engineers. \$3. single numbers 50c. Western Society of Engineers, 1135 Monadnock Bldg, Chicago.
- Wis U Bul Eng S**—Bulletin of the University of Wisconsin, Engineering Section. Univ. of Wis., Madison.

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A Cumulative Index to Engineering and Trade Periodicals

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- Abattoirs.** See Slaughtering and slaughter houses
- Abbeys**
Ancient abbey of St. Etol. J. Alaux. II Am Inst Arch J 3:12-13 Ja '15
- Aberdeen, South Dakota**
Sewerage
Sewage disposal plant at Aberdeen, South Dakota; with discussion. W. G. Potter. II plans W Soc B J 19:788-805, pl 1-8 O '14; Same. Eng & Contr 43:37-8 Ja 13 '15; Same cond. Metal Work 84:214-17 Ag 13 '15
Water supply
Rectangular fire-service reservoir. W. G. Potter. II Eng Rec 71:260-1 F 27 '15
- Abilene, Kansas**
Politics and government
Results obtained at Abilene, in 16 months under commission-manager government. K. Middle. Eng & Contr 42:503-4 N 25 '14
- Ability**
See also Efficiency, Industrial; Leadership
Ability tests
Measuring human intelligence: standardized tests used by the Public health service. H. A. Knox. II Sci Am 112:52-3-4 Ja 9 '15
Mental tests of dementia. B. Hart and C. Spearman. Sci Am 8 80:206-8 S 25 '15
New way of measuring mental ability. A. M. Jungmann. II diag Sci Am 8 80:140-1 Ag 28 '15
Selecting the right occupation. Eng N 74:321-2 Ag 12 '15
Teaching defective children. A. M. Jungmann. Sci Am 112:381 Ap 17 '15
- Abtain St. Nazaire, France**
Church of Abtain St. Nazaire. J. P. Alaux. II Am Inst Arch J 3:337-8 Ag '15
- Abrasive wheels.** See Grinding machines; Grinding wheels
- Abrasives**
Abrasive for grinding steel; patented by H. T. Kalmus. Met & Chem Eng 13:762-3 O 15 '15
Abrasive products at San Francisco fair. II Iron Tr R 57:487 S 9 '15
Abrasives; various kinds used in grinding and polishing. C. Hawke. Metal Ind n 13:101-2, 148-50 Mr-Apr '15
Carborundum products, their manufacture and uses as abrasives and refractories. C. B. Hawke. Iron Age 96:1121 N 11 '15
Grinding wheels for foundry use. C. F. Dietz. Iron Tr R 57:314-18-1 Ag 12 '15
Grinding wheels; history and description of various abrasive compounds. W. C. Gold. Metal Ind n 13:450-2 N '15
Laps and lapping; abstracts. W. A. Knight and A. A. Gano. diag Am Soc M 16 J 37: 461-6 Ag '15; Iron Tr R 57:24-6 Ji 1 '15; Mach 21:976-8 Ag '15; Discussion. Am Soc M 16 J 37:469-8 Ag '15
See also Grinding and polishing
- Absolute zero.** See Temperature, Low
- Absorbent cotton.** See Cotton, Absorbent
- Absorption**
Absorption of glucose by bone-black. H. A. Morton. Am Chem Soc J 36:1832-3 S '14
Reagents for use in gas analysis; alkaline pyrogallol. R. P. Anderson. diag J Ind & Eng Chem 7:587-96 Ji '15
Specific absorption of reagents for gas analysis. R. P. Anderson. J Ind & Eng Chem 7: 587 Ji '15
- Academic freedom**
Common sense regarding academic freedom. Eng Rec 72:35 Ji 10 '15
Common sense regarding academic freedom. J. W. Alvord. Eng Rec 72:176 Ag 7 '15
- Accelerometer**
Measuring shocks of vehicles and vibrations of buildings: a means for investigating important traffic problems. A. Boyer-Guillem. II diag Sci Am 8 78:364-5 D 5 '14
- Accidents**
See also Aeronautics--Accidents; Automobile accidents; Collisions at sea; Railroads--Accidents; Shipwrecks; Street accidents; Subways--Accidents
Accidents, Industrial
Conditions of industrial accidents. Sci Am 8 79:179 Mr 20 '15
Crane and chain accidents: abstract. Ind Eng 14:411-12 O '14
Explosives and accidents. Engineer 118:531-2 D 4 '14
Industrial accidents in Massachusetts. Sci Am 112:433 My 8 '15
Intoxication, a cause of accidents. T. D. West. II Iron Tr R 56:713-16 Ap 8 '15; Same. Foundry 43:267-70 Ji '15
Prevention of accidents in cotton mills. J. Calder. Textile World 49:622-4 S '15
Prevention of infection. T. Darlington. Iron Tr R 56:770 Ap 15 '15
Relation between accidents and inadequate lighting. Illum Engr 8:383-5 S '15
Safety in stone quarrying; typical accidents in quarries. O. Bowles. U S Bur Mines Tech Pa 11:43-6 '15
See also Boiler accidents; Boiler explosions; Coal mines and mining--Accidents and explosions; Coke ovens--Accidents; Cranes, derricks, etc.--Accidents; Employers' liability; Explosions; First aid in illness and injury; Foundries--Accidents; Gas manufacture and works--Accidents; Metallurgical plants--Accidents; Mine accidents; Safety devices and measures; Workmen's compensation
- Accountants**
Contractual relations between clients and accountants. H. M. Temple. J Account 20: 261-6 O '15
Relations of accountants and engineers in special investigations of various kinds of plants. H. C. Hopson. J Account 20:397-8 N '15
- Accountants, Public**
Accountants and the public. H. D. Love. J Account 18:480-92 D '14
Accounting profession in the United States. J. M. Masters. J Account 20:349-55 N '15

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- Accounting profession; its demands and its future. *Id.* W. Sells. *J Account* 20:325-33 N '15
- Certified public accountants. W. H. Rand. *J Account* 19:14-20 Ja '15
- Competitive bidding. *J Account* 20:81-90, 133-6, 365-6 Ag. N '15
- National aspects of public accountancy. *J Account* 19:46-50 Ja '15
- Phases of professional ethics. J. F. Forbes. *J Account* 20:271-5 O '15
- Will we co-operate or must we incorporate? W. D. Whitcomb. *J Account* 20:376-83 O '15
- See also* Accounting; American association of public accountants

Advertising

- Educating the public. *J Account* 19:359-63 My '15

Examinations

- C. P. A. examinations. S. Walton. *J Account* 19:330-42 Mr '15
- How to pass the C. P. A. examinations. J. Hunter. *J Account* 20:34-7 J1 '15
- Ohio state board of accountancy examination. *J Account* 19:365-71 Ja '15

Law

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- Indiana C. P. A. law. *J Account* 19:304-5 Ap '15
- Iowa C. P. A. law. *J Account* 19:369-72 My '15
- Kansas C. P. A. law. *J Account* 19:372-4 My '15
- South Carolina C. P. A. law. *J Account* 19:308-9 Ap '15
- Texas C. P. A. law. *J Account* 19:375-80 My '15

Accounting

- Accountant's report from the standpoint of the several parties at interest. J. S. M. Goodloe. *J Account* 20:91-103 Ag '15
- Accounting for cement packages. G. Wilson. *J Account* 19:198-205 Mr '15
- Accounting for depreciation. R. Sealy. *Elec W* 65:460-1 P 20 '15
- Accounting system for contractors. *Elec R & W Elec'n* 66:162 Ja 23 '15
- Consolidation of balance sheets in holding company accounting. A. W. Wright. *J Account* 19:21-33 Ja '15
- Cooperative organization business methods. W. H. Kerr and G. A. Nabholz. *Bull'og I' H Agric Bul* 178:1-24 '15
- Credits from the viewpoint of a certified public accountant. F. H. Hurdman. *J Account* 18:435-54 D '14
- Department store accounts. H. C. Mages. *J Account* 19:268-91 Ap '15
- Depreciation accounts. W. H. Lawton. *Elec W* 65:1678-9 Ja 26 '15
- Depreciation problems. H. Erickson. *Am Gas Inst Trn* 8:pt 2, 1682-1688; Discussion, 9: pt 2, 1638-83 '14
- Federal trade commission and accounting. *J Account* 20:129-33 Ag '15
- Importance of accrued accounts. J. F. Forbes. *Elec Rty J* 46:809-10 O '15
- Inter-department profits. S. Walton. *J Account* 19:164-8 P '15
- Library for accounting employees. *Elec Rty J* 46:853 N 8 '15
- Overhauling capital stock. *J Account* 19:62-5 Ja '15
- Return of annual net income by corporations. W. F. Weiss. *J Account* 19:260-7 Ap '15
- Scope of accountancy. *J Account* 19:456-8 Ja '15
- Secret reserves. J. P. Joplin. *J Account* 18: 407-17 D '14
- Sub-division, saving and safety. *Horseless Age* 34:869-70 D 16 '14

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counting; Railroads—Accounting; School accounting; Waterworks—Accounting

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- Accountancy in Canada. G. Edwards. *J Account* 20:334-48 N '15
- Accounting profession in the United States. J. B. Masters. *J Account* 20:350-2 N '15

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- Words often used incorrectly. S. Walton. *J Account* 20:385-6 N '15

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- Accountancy in Canada. G. Edwards. *J Account* 20:334-48 N '15

China

- Accountant in the Orient. E. S. Fischer. *J Account* 20:356-60 N '15

Accumulators. *See* Storage batteries

Accumulators, Steam. *See* Steam accumulators

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- Indicator in pyrolytic acid. J. M. Joplin. *J Ind & Eng Chem* 7:586 J1 '15
- Production of acetone from pyrolytic acid. M. Barrin. *Il J Ind & Eng Chem* 7:927-9 N '15

Acetic anhydride

- Action of acetic anhydride on some benzylidene anthranilic acids. J. B. Kelsey and C. E. Too. *Am Chem Soc J* 37:562-6 Mr '15

Acetolysis

- Acetolysis of carbohydrates. S. Born and J. M. Nelson. *Am Chem Soc J* 37:1763-9 J1 '15

Acetone

- Production of acetone from pyrolytic acid. M. Barrin. *Il J Ind & Eng Chem* 7:927-9 N '15

Acetylacetone-thiourea

- Constitution of acetylacetone-thiourea. W. J. Hale and A. G. Williams. *Am Chem Soc J* 37:694-600 Mr '15

Acetylene

- Acetylene-oil gas generating outfit. *Il Mach* 21:513-11 P '15
- Action of acetylene on metals. A. C. Morrison. *Sol Am* 113:487 D 4 '15
- Dissolved and self-generated acetylene. M. K. Dunham. *Iron Age* 96:3-13 Ag 12 '15
- Effect of acetylene on metals. *Sol Am* 113:408 N 6 '15
- Explosibility of acetylene. G. A. Hurrell and G. H. Chaffell. *I' H Bur Mines Tech* 19 112:1 12 '15
- Illumination of the substation lamp, the use of electricity of acetylene. H. L. All. *diagr* 11:161 2 O '15
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- Preparation of acetylene. C. H. Collier. *Engr* 26:262 D '14
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Advantages of society and association affiliations. J. P. Joplin. *J Account* 19:325-33 My '15
- American association of railroad superintendents**
28th annual convention, San Francisco, Aug. 19-20. *Ity Age* 59:379-82 Ag 27 '15
- American association of state highway officials**
New association of state highway officials. *Eng Rec* 70:sup236 O 19 '14
Organization. Washington, D. C., Dec. 12. *Good Roads* n 8 9:38 Ja 2 '15
- American boiler manufacturers' association**
27th annual convention, Erie, Pa., June 22. *Iron Tr R* 56:1301 Je 21 '15
- American chemical society**
50th meeting, New Orleans, March 31-April 3. *J Ind & Eng Chem* 7:370-9 My '15
50th meeting, New Orleans, March 31-April 3. *Mot & Chem Eng* 13:380-8 My '15
50th meeting; program of papers and reports of committees. *J Ind & Eng Chem* 7:411-3 My '15
51st meeting, Seattle, Wash., Aug. 31-Sept. 3. *Mot & Chem Eng* 13:387-9 S 15 '15
51st meeting, Seattle, Wash., Aug. 31-Sept. 3; program of papers. *J Ind & Eng Chem* 7: 830-1 O '15
- American civic association**
10th annual convention, Washington, D. C. *Munic J* 37:967 D 31 '14
- American concrete institute**
Edison fire decreased at Concrete Institute, Chicago, Feb. 9-12. *Eng Rec* 71:248 F 20 '15
11th annual convention, Chicago, Feb. 9-12. *Concrete Com* 6:113 23 Mr '15
11th annual convention, Chicago, Feb. 9-12. *Eng N* 73:390-1 F 18 '15
- American concrete pipe association**
Annual convention, Chicago, Feb. 15-16, 1915. *Concrete Com* 6:111 Mr '15
- American cotton manufacturers' association**
Meeting at Memphis Textile World 19 176 07 My '15
- American electric railway association**
Annual convention, San Francisco, 1915; abstract of paper, reports and discussions. *Elec Ry J* 46 3d 69 O 9 '15
Annual convention, San Francisco, Oct. 4-8. *Elec W* 66:291 O 9 '15
Annual convention, San Francisco, Oct. 4-8; program. *Elec Ry J* 46:262 F 29 '15
Chicago Elevated cotton panned. *Elec Ry J* 46:190 Ap 24 '15
Code of principles. *Elec Ry J* 41:992, 1040 O 31, N 7 '14
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- American electrochemical society**
American electrochemical society in its external relations. E. A. Laddury. *Mot & Chem Eng* 13:377 9 My '15
27th general meeting, Atlantic City, April 22-23. *Elec R & W* 136: n 66, 821 F My 1 '15
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- American electroplaters' society**
Outlook for the future effect of the society on Canadian metal industries. W. B. Burrows. *Metal Ind* n 13:320 S Jo '15
3d annual convention, Dayton, O., June 2-6. G. H. Proctor. *Metal Ind* n 13:323 S Jo '15
3d annual meeting, Dayton, O., June 2-6. *Foundry* 43:284 J '15

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6th annual convention. *Am Inst Arch J* 3:241-3 Je '15
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Forest relations between the East and the West as the East hopes to see them. H: S. Drinker. *Am For* 21:1054-6 N '15
- American foundrymen's association**
Annual convention, Atlantic City. *Foundry* 43: 385-94 O '15
Annual convention, Atlantic City. *Iron Tr R* 57:694-701 O 7 '15
Annual meeting at Atlantic City; programs. *Foundry* 43:333-41 S '15
Convention held at Atlantic City, Sept. 27-Oct. 1; abstract of papers and discussion. *Iron Age* 96:814-19, 822-4 O 7 '15
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Address. E. C. Jones. *Am Gas Light J* 103:213 O 4 '15
Constitution and by-laws. *Am Gas Inst Pro* 9: pt 1, 48-62 '14
List of members of the American gas institute. *Am Gas Inst Pro* 9:pt 2,1815-1936 '14
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- American institute of architects**
First award of the collaborative prize of the A. I. A. to the students of the American academy in Rome. *Il Am Inst Arch J* 3:344-5 Ag '15
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Personal reminiscences of Charles Follen McKim. G. Brown. *Arch Rec* 38:576-82 N '15
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History of the Schenectady section of the A. I. E. E. S. M. Crego. *Gen Elec R* 18: 1006-7 O '15
Midwinter convention; abstracts of papers. *Elec W* 65:523-8 F 27 '15
Midwinter convention, New York city, February 17-19, 1915. *Elec R & W Elec'n* 66: 389-96 F 27 '15
Panama-Pacific convention, San Francisco, Sept. 16-18. *Elec R & W Elec'n* 67:567-73 S 25 '15
Panama-Pacific convention, San Francisco, Sept. 16-18. *Elec W* 66:677-9 S 25 '15
32d annual convention, Deer Park, Md., June 20-July 2. *Eng N* 74:90-1 J 18 '15
32d annual convention, Deer Park, Md., June 20-July 2; abstracts of papers and discussions. *Elec R & W Elec'n* 67:69-75 J 10 '15
32d annual convention, Deer Park, Md., June 20-July 2; abstracts of papers and discussions. *Elec W* 66:6-11, 62-7 J 1-3 '15
306th meeting, Cleveland, Ohio, March 18-19. *Elec R & W Elec'n* 66:598-8 Mr 27 '15
314th meeting, St. Louis, Oct. 19-20. *Elec R & W Elec'n* 67:806-8 O 30 '15
- Industrial power committee**
Industrial power committee. D: B. Rushmore. *Am Inst E M Pro* 34:711-14 My '15
- American institute of metals**
Annual convention, Atlantic City, Sept. 28-30. *Iron Tr R* 57:702-4 O 7 '15
Annual meeting, Atlantic City, Sept. 28-30. *Foundry* 43:394-7 O '15
Annual meeting, Atlantic City, Sept. 28. *Iron Age* 96:819-22 O 7 '15
Annual meeting, Atlantic City, Sept. 28-30. *Met & Chem Eng* 13:712 O 15 '15
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- American institute of mining engineers**
A. I. M. E. considering changes. *Eng & Min J* 98:1057-8 D 12 '14
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May the Institute endorse opinions? R. W. Raymond. *Eng & Min J* 99:205-6 Ja 23 '15
Officers, members, rules, etc. *Am Inst Min E Bul* 101:supl-190 My '15
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Pittsburg meeting, Colliery 35:245-6 D '14
Shall the A. I. M. E. be able to express itself? Opposition's case by R. W. Raymond; Affirmative view by J. F. Kemp. *Eng & Min J* 98:1054-6 D 12 '14
- American international corporation**
Big financial concern to aid foreign trade. *Ry R* 57:705 N 27 '15
Organize to promote foreign trade. *Elec W* 66:1180-1 N 27 '15
- American iron and steel institute**
Cleveland meeting, 1915. *Iron Tr R* 57:846-8 O 28 '15
Cleveland meeting, 1915; papers. *Iron Age* 96: 984-1005, 1025-8 O 28 '15
8th general meeting, New York city, May 28. *Iron Age* 95:1243-6+ Je 3 '15
9th general meeting, Cleveland, Oct. 22-23. *Met & Chem Eng* 13:830-1 N 15 '15
Spring meeting, New York city, May 28. *Iron Tr R* 56:1117-18 Jo 3 '15
- American mining congress**
17th annual meeting. *W Soc M J* 19:1016-18 D '14
- American museum of natural history**
Two groups in the American museum of natural history. J. W. Griggs. *Il Sci Am* 112: 345 Ap 10 '15
- American museum of safety**
New York Central awarded Harriman safety medal. *Ry Age* 58:271-2 F 12 '15
- American public health association**
42d annual convention, Jacksonville, Fla., Nov. 30 to Dec. 4, 1914. *Munic J* 37:902-3 D 17 '14
43d annual meeting, Rochester, N. Y., Sept. 6-13. *Munic J* 30:483-4+ S 23 '15
Sanitary engineering section discusses refuse disposal, sewerage, water supply and methods of analysis. *Eng Rec* 70:sup385-6 D 12 '14
- American railway association**
Fall meeting, Chicago, Nov. 18, 1914. I. C. Fritch. *Ry Age* 57:1113 D 18 '14
Fall session, Chicago, Nov. 17, 1915. *Ry R* 57:648-9 N 20 '15
- American railway bridge and building association**
25th annual convention, Detroit, Mich., Oct. 19-21. *Eng N* 74:858-9 O 28 '15
25th annual convention, Detroit, Mich., Oct. 19-21. *Ry Age* 59:753-64 O 22 '15
25th annual convention, Detroit, Mich., Oct. 19-21. *Ry R* 57:516-19 O 23 '15
- American railway engineering association**
Assigned work of railway engineering association. *Eng Rec* 71:526-7 Ap 24 '15
Committee reports on electricity, ties, wood preservation, fences. *Elec Ry J* 45:570-1 Mr 20 '15
Committees; complete list of names of members appointed and subjects specified for investigation and report. *Ry Age* 58:853-5 Ap 16 '15
President's address. W. B. Storey. *Ry R* 56: 385-6 Mr 20 '15
16th annual convention, Chicago, March 16-18. *Eng Rec* 71:411-12 Mr 27 '15
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16th annual meeting, Chicago, March 16-18. *Eng N* 73:598-9 Mr 25 '15
Year's work reviewed. *Eng Rec* 71:374-7 Mr 20 '15
- American railway master mechanics' association**
Committees. *Ry R* 57:522-3 O 23 '15
48th annual convention, Atlantic City, June 9-11. *Elec Ry J* 45:1115-17 Je 12 '15
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Semi-annual meeting, Chicago, Sept. 8. Ry Age 59:513 S 17 '15
- American railway tool foremen's association**
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Report of committee on standards. Good Roads n s 9:233-9 Jo 5 '15
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Meeting at Atlanta, Nov. 9-13. Concrete Cem 5:266-7 D '14
Road congress at Atlanta. Good Roads n s 8:217-20 D 5 '14
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Abstract of the annual report for 1914. Eng & Min J 99:583-3 Mr 27 '15
Securities. Eng & Min J 100:364 Ar 28 '15
- American society for testing materials**
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Fifty-three standards considered. Iron Tr R 57:37-48 J 1 '15
Testing society still grows. Iron Tr R 56:1300 Jo 24 '15
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American society of civil engineers on eve of important action. Eng Rec 71:574-5 My 8 '15
Needs of the society. Eng Rec 71:67 Jn 16 '15
Rules for special technical committees. Eng Rec 71:121-2 Ja 23 '15
62d annual meeting, New York, Jan. 20, 1915. Eng N 73:185-7 Ja 28 '15
62d annual meeting, New York, Jan. 20, 1915. Eng Rec 71:122 Ja 23 '15
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Constitution and by-laws. Am Soc Heat & V 19 20:443-58 '14
Our society, its aims and opportunities; with discussion. J. J. Blackmore, Am Soc Heat & V 19 20:392-404 '14
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21st annual meeting, January 19-23, 1915. Heat & Ven 12:39-48 P '15
21st annual meeting, New York city, January 19, 1915. Metal Work 88:203-7-4 Ja 29 '15
21st annual meeting, New York city, Jan. 19-22. Dom Eng 70:144-7 Ja 30 '15
21st annual meeting, New York, Jan. 19-22, 1915. Power 41:175-8 F 2 '15
- American society of marine draftsmen**
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Object of the society and its success. Int Marine Eng 20:193 My '15
- American society of mechanical engineers**
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Fall meeting, New York, Dec. 1-4, 1914. Iron Tr R 55:1093-7 D 10 '14
- Mechanical engineers meet at San Francisco. Power 42:460-1 S 28 '15
Reports of standing committees. Am Soc M E J 37:ix-xvi D '15
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Spring meeting. Am Soc M E J 37:v-xiii M '15
Spring meeting, Buffalo, June 22-25. Iron Tr R 57:49-50 J 1 '15
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35th annual meeting, New York city, 1914. Eng N 72:1188-9 D 10 '14
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- American society of municipal improvements**
Convention, Dayton, O. Eng N 74:810-12 () 21 '15
Dayton convention, Oct. 12-15. Muncie Eng 49:189-90 N '15
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Twenty-one years of growth and activity. Muncie J 39:635-9 () 7 '15
Work of society committees. Muncie J 39:619-20 () 21 '15
- American society of refrigerating engineers**
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- American society of sanitary engineering**
10th annual meeting, San Francisco, August 9-11. Dom Eng 72:262-3 Ag '15
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- American telephone & telegraph co.**
Annual report. Elec N 66:753-4 Mr 20 '15
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Promulgation of the boiler code. Am Soc M E J 37:ix-xx D '15
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Constitution and list of members. Am Water Works Assn J Sup 1:1-31 J 1 '14
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Modifications made in committees' recommendations. Elec Ry J 45:237 Ja 20 '15
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Design features of the approaches of the North side Point bridge, Pittsburgh, Pa. *diag Eng & Contr* 42:196-8 *Ag* 26 '14

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Instructions of the Pennsylvania state highway commissioner to bridge companies. *Eng & Contr* 43:79 *Ja* 27 '15

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Center bearing, machinery and gates, Congross St. swingbridge, Troy, N. Y. *diag plan Eng N* 73:804-5 *Ap* 29 '15

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- Trolley wire on double-leaf bascule bridge. S. L. Foster. *diag* Elec Ry J 46:1042-4 N 20 '15

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- Balanced cantilever reinforced-concrete bridge, Chester, Penn. *II*; H. Quimby. *II* *diag* Eng N 73:578-81 Mr 25 '15
- Construction features of the Bloomfield bridge, Pittsburgh, Pa. A. E. Sertore. *II* Eng & Contr 43:5-8 Ja 6 '15
- Construction features on the reinforced concrete cantilever bridge on Rummynode avenue, Cincinnati. *II* Eng & Contr 43:312-13 Ap 7 '15
- Design features of the cantilever, simple-truss and girder spans of the Bloomfield bridge, Pittsburgh, Pa. *diag* Eng & Contr 42:240-3 S 9 '14
- Design features of the substructure and approach of the Bloomfield bridge, Pittsburgh. *diag* Eng & Contr 42:246 7 S 23 '14
- Design of the reinforced concrete cantilever bridge on Rummynode avenue, Cincinnati. *diag* Eng & Contr 43:271-2 Mr 24 '15
- Erection traveler, new Quebec bridge. H. P. Jordan. *II* plans Eng N 73:417-22 Mr 4 '15
- Hopple street viaduct, Cincinnati. *II* *diag* Muncie J 39:179-83 Ag 5 '15
- Ornamental arch effect secured by cantilever design, Chester, Pa. Eng Rec 71:164 1st 6 '15
- Provision for traction streamers in Quebec bridge. C. A. Norton. *diag* Eng Rec 71:492-3 Ap 17 '15
- Reinforced-concrete cantilever bridges. A. E. Hill; L. C. Smith; P. H. Frankland. *II* Eng N 73:790-2 Ap 22 '15

Bridges, Concrete

- Architectural effects secured in Glen Falls arch bridge over Hudson river. *II* *diag* Eng Rec 72:574-6 N 6 '15
- Balanced cantilever reinforced-concrete bridge, Chester, Penn. *II*; H. Quimby. *II* *diag* Eng N 73:578-81 Mr 25 '15
- Belgian bridge in reinforced concrete. Sci Am 112:335 Ap 10 '15
- Bridge work of the C. M. & St. P. Ry. *II* plan Ry *It* 56:335-8 Mr 13 '15
- Bridges and viaducts on the Multnomah county section of the Columbia river highway. *II* Good Roads N 10:243-7 N 6 '15
- Building a long concrete viaduct at St. Louis. P. A. Richardson. *II* Eng Rec 70:892-3 D 26 '14
- Cabrillo bridge at the San Diego exposition. *II* *diag* Eng N 73:926-8 My 13 '15

- Casting concrete-slab bridges for the Pennsylvania. R. R. L. M. Schrufer. *II* *diag* Eng N 71:125-6 J1 15 '15
- Completing the summit cut-off of the Lackawanna. *II* *Ity* Age 59:809-10 O 20 '15
- Concrete arch bridge at Saskatoon. *II* *diag* Eng N 73:434-6 Mr 4 '15
- Concrete bridges with stone and brick facing. C. E. Dryer. *II* Eng N 73:1214-15 Je 21 '15
- Concrete highway bridges: some data on highway bridges in Illinois. C. Older. Eng & Contr 44:332 O 27 '15
- Concrete viaduct at San Diego. *II* Muncie Eng 49:105-6 S 15 '15
- Concrete viaduct of a new type; eastern viaduct, New York Connecting R. R. *II* *diag* Eng N 73:886-7 My 6 '15
- Concrete viaducts on the Pennsylvania railroad. D. A. Willey. *II* Sci Am S 79:21 Ja 9 '15
- Construction features of the duplicate reinforced concrete arch bridges at Third ave., Cedar Rapids, Iowa. *diag* Eng & Contr 42:148-50 Ag 12 '11
- Construction features of the reinforced concrete cantilever bridge on Rummynode avenue, Cincinnati. *II* Eng & Contr 43:312-13 Ap 7 '15
- Construction of the Gwynns Falls arch bridge. *II* *diag* *Ity* Age 57:1037 40 D 4 '14
- Construction of the Huddsford cut-off, D. L. & W. R. R.; Tunkhannock viaduct and Martin's Creek viaduct. *II* *diag* *Ity* *It* 56:443-8 Ja 30 '15
- Construction of the Twelfth street traffic way viaduct, Kansas City, Mo. E. E. Howard. *diag* plan Eng & Contr 44:335 32 O 27 '15
- Contractors to replace \$29,000 worth of concrete bridge work. J. H. Amie. *II* Concrete Com 7:104 6 S 11 '15
- Data on reinforced concrete railroad bridges and extent to which such bridges are used. *diag* plan Eng & Contr 43 29 32 Ja 13 '15
- Design and construction of a reinforced concrete truss bridge with spaced counterfort abutments near Methven, Wash. A. E. Holmway. *diag* Eng & Contr 44:396 2 S 15 '15
- Design and construction of principal highway bridge at Mead, Italy. A. M. Wolf. *diag* Concrete Com 6:294 6 Je 14 '15
- Design and construction of the Lawrence viaduct, Fair Arson R. R., Lawrence, Switzerland. A. M. Wolfe. *II* *diag* Concrete Com 6:294 4 My 11 '15
- Design and construction of the Lutz Anderson bridge over the Charles river, Cambridge and Boston, Mass. *II* plans. Eng & Contr 42:331-8 O 7 '11
- Design and construction of the Main street reinforced concrete viaduct at Fort Worth, Tex. S. W. Lawton. *diag* Eng & Contr 43:211-17 Mr 10 '15
- Design and construction of the San Jacinto street reinforced concrete bridge, Houston, Texas. *II* *diag* Eng & Contr 42 192 3 N 25 '14
- Design, construction and detailed costs of a reinforced concrete girder bridge over Red Cedar river, Melgaard. R. A. South. *II* *diag* Eng & Contr 41 19 53 J1 21 '15
- Design, construction and detailed costs of the McKinley Ford bridge, La Salle county, Ill. *II* *diag* Eng & Contr 43:129 82 2 21 '15
- Design features of the Alsea bridge, Clatsop county, Ohio N 1,163 ft. reinforced concrete structure. *diag* Eng & Contr 44:295 9 D 15 '15
- Design of concrete highway bridges with special reference to standardization. C. H. McCullough. *diag* Eng & Contr 43 268 30 Mr 24 '15
- Design of the reinforced concrete cantilever bridge on Rummynode avenue, Cincinnati. *diag* Eng & Contr 43:312 2 Mr 21 '15
- Erecting reinforced concrete trestles. E. M. Orhue. *II* *Ity* Age 58:1080 My 21 '15
- Fullway viaduct in Baltimore built on sharp curve with concrete from 200 foot tower. *II* *diag* Eng Rec 71:514 6 My 4 '15
- Just concreting on Brooklyn Brighton viaduct, Cleveland. *II* *diag* Eng N 74:191 6 S 9 '15
- Features of the Tunkhannock creek viaduct recently completed at Nicholson, Pa. *II* Eng & Contr 44:898-90 N 17 '15

Bridges, Concrete—Continued

- Five bridges erected in two days; unit system of reinforced concrete solves time element. *ll* *Eng Rec* 71:172-4 F 6 '15; Same cond. *Eng M* 49:109-11 Ap '15
- Flat-slab bridges at Denver combine permanency and good appearance. W. H. Wheeler and C. A. P. Turner. *ll* *Eng Rec* 72:38-40 J1 10 '15
- Forms built before supporting falsework for concrete bridge. R. C. Hardman. *diag* *Eng Rec* 72:492 O 16 '15
- Haights Run bridge erected for city of Pittsburgh. *ll* *Concrete Cem* 5:244 D '14
- Half-mile concrete viaduct provides double-deck trafficway in Kansas City. H. I. Fox. *ll* *diag* *Eng Rec* 71:164-6 F 6 '15
- Handling steel centers for concrete arches. H. K. Ketchum. *ll* *Eng N* 74:162-3 S 2 '15
- Lipple street viaduct, Cincinnati. *ll* *diag* *Munic J* 39:179-83 Ag 5 '15
- Light ornamental bridge, Abington, Mass. *ll* *Eng N* 74:97 J1 15 '15
- Low-water bridges over torrential streams, Bexar co., Texas. T. Bartlett. *ll* *diag* *Eng N* 73:628-30 Ap 1 '15
- Methods and costs in constructing the 450-ft. East Fourth street viaduct at Fort Worth, Texas. M. W. Robinson. *ll* *Concrete Cem* 5:231-8 D '14
- New concrete arch viaduct of the Philadelphia, Baltimore & Washington R. R. over Gwynns Falls, Baltimore. *ll* *plans map Ry R* 56:345-8 Mr 13 '15
- Ornamental and cheap concrete bridge, Canton City, Colo. R. C. Hardman. *ll* *diag* *Eng N* 71:241-2 Ag 5 '15
- Ornamental bridge at Akron built of slag concrete. *ll* *Eng N* 74:769-70 O 21 '15
- Ornamental concrete elevated railway, New York city. M. B. Griset. *ll* *diag* *Eng N* 74:913-18 N 11 '15
- Pennsylvania's concrete bridge over the Susquehanna. *diag* *Eng Rec* 71:326 Mr 13 '15
- Progress on Summit cut-off of the Lackawanna. *ll* *diag* *Ry Age* 58:235-9 F 5 '15
- Reinforced-concrete arch bridge has stone facing. *ll* *Eng Rec* 72:164-5 Ag 7 '15
- Reinforced-concrete bridge with cantilever abutments; overhead crossing at Hallstead, Pa. *diag* *Eng Rec* 70:632-3 D 5 '14
- Reinforced concrete bridges. *Ry Age* 59:761-2 O 22 '15
- Reinforced concrete bridges along the Columbia highway in Oregon. K. P. Hillner. *ll* *diag* *Eng & Contr* 43:121-3 F 10 '15; Same. *Eng N* 72:144-8 D 10 '14
- Reinforced-concrete cantilever bridges. A. B. Hill. *ll* *K. Smith; R. H. Frankland. ll* *Eng N* 73:790-2 Ap 22 '15
- Reinforced-concrete highway arch for grade separation. *diag* *Eng Rec* 70:703-4 D 26 '14
- Reinforced-concrete sewer viaduct. K. P. Hillner. *ll* *diag* *Eng N* 73:1191 Jo 17 '15
- Reinforced-concrete viaduct at St. Louis, Mo. C. W. Martin. *ll* *diag* *Eng N* 74:726-7 O 14 '15
- San Francisco Mission street viaduct. A. J. Cleary. *ll* *plan Eng N* 73:319-20 F 18 '15
- Surface treatment of concrete bridge for railway and highway traffic. A. M. Wolf. *ll* *Concrete Cem* 6:169-75 Ap '15
- Test of full-size reinforced-concrete bridge slab. *Eng Rec* 71:26 Ja 2 '15
- Tests of reinforced concrete structures on the Great Central railway; abstract. J. B. Hall. *Am Soc M* 19 J 37:122-3 F 15 '15
- Track depression at Milton; Illinois Central R. R. *ll* *diag plan Eng N* 71:110-12 J1 15 '15
- Track depression at Minneapolis. *diag* *Eng N* 73:516-17 Mr 18 '15
- Tunkhannock viaduct nearing completion. *ll* *Eng Rec* 72:42-3 J1 10 '15
- Twelfth street double-deck viaduct at Kansas City. *ll* *diag Eng N* 73:10-15 Ja 7 '15
- Unit-construction system applied to a three-mile concrete viaduct to reduce the cost. *ll* *diag plan Eng Rec* 72:218-51 Ag 28 '15
- See also* Trestles, Concrete

Patents

- Six concrete-bridge patents void on brand grounds. R. M. Lewis. *diag* *Eng N* 74:1094-5 D 2 '15

Bridges, Iron and steel

- Allowing for impact in bridge calculations. J. D. W. Ball. *diag* *Engineer* 120:161-3 Ag 13 '15
- Alloy steels economical for long-span bridges. J. A. L. Waddell. *Eng Rec* 72:586-7 S 25 '15
- Comparison of carbon steel and high-alloy steels for bridges. J. A. L. Waddell. *Eng & Contr* 41:686-88; Discussion. 41:688-90; 42:243-4, 496-6 Jo 17, S 9, N 25 '14
- Design of the main shoes of the new Quebec bridge. *ll* *diag* *Engineer* 118:527-8 D 4 '14
- Details of main span of Detroit-Superior bridge at Cleveland. *diag* *Eng Rec* 70:640-1 D 12 '14
- Deterioration of steel bridges over railway tracks at Buffalo, R. J. Reidpath. *ll* *diag* *Eng N* 73:1111-7 Jo 10 '15
- Development of the Sudan. *ll* *map plans diag* *Engineer* 119:271-4 Mr 19 '15
- Difficult grade crossing elimination in Albany, N. Y. *ll* *diag plan Ry Age* 59:961-3 N 19 '15
- Erecting the largest steel arch bridge in existence, Hell Gate, New York. *ll* *Sci Am* 112:193 S 4 '15
- Erection at Hell Gate arch checks calculations. *ll* *Eng Rec* 72:220-1 Ag 21 '15
- Erection of new Quebec bridge. H. P. Borden. *ll* *Eng Rec* 71:80-1 Ja 16 '15
- Erection of steel arch span, Detroit-Superior viaduct. *ll* *diag* *Eng N* 74:366-7 Ag 19 '15
- Erection of the world's greatest steel bridge at Hell Gate. *ll* *Iron Tr R* 57:944-5 N 11 '15
- Fabricating steelwork for the Hell Gate arch. *ll* *Eng Rec* 70:681-6 D 26 '14
- Features of a unique bridge over the Bow river in Alberta, Canada. *ll* *Eng & Contr* 44:53 J1 21 '15
- Hardinge bridge over the lower Ganges in India. K. C. Coleman. *ll* *diag* *Eng N* 73:1160-4 Jo 17 '15
- Hell-Gate arch bridge and the New York Connecting railroad. *ll* *diag map Ry R* 57:453-61 O 9 '15
- Hell Gate bridge in the shop. *ll* *Eng N* 72:1116-18 D 3 '14
- Largest arch bridge in the world; Hell Gate bridge. *ll* *Sci Am* 113:540-1-4 O 16 '15
- Long-span continuous-truss bridge over the Ohio. *diag* *Eng N* 74:61-6 J1 8 '15
- Longest simple truss span in world to be erected over Ohio river at Metropolis. *diag* *Eng Rec* 72:54-4 J1 10 '15; Abstract (Silliman steel for bridge construction). *Eng M* 49:913 S 4 '15
- New bridge across the Mississippi river at Kookuk. *plans Ry Age* 58:200 Ja 29 '15
- New double-deck bridge over the Missouri river at Kansas City. *diag map Ry Age* 59:281 Ag 15 '15
- New methods evolved in building world's largest bridge; Quebec erection. *ll* *Eng Rec* 72:96-100 J1 2 '15
- 97-ft. Hell Gate bridge becomes an arch. *ll* *Eng N* 74:708-9 O 7 '15
- Notable structures on the Spokane-Ayer cut-off. *ll* *diag Ry Age* 58:623-5 Mr 19 '15
- Ohio river bridge for the C. B. & Q. R. R. *diag Eng N* 71:230-2 J1 29 '15
- Pacific highway interstate bridge over the Columbia river and its approaches. E. E. Howard. *diag* *Eng & Contr* 43:540-3 Ja 16 '15
- Pacific highway interstate bridge over the Columbia river at Portland, Oregon. Good Roads *N* 8 10:61-2 J1 10 '15
- Pacific highway interstate bridge over the Columbia river. Portland, Ore. E. E. Howard. *diag* *Eng N* 73:1218-21 Jo 24 '15
- Pacific highway interstate bridge; special pier and floor design feature. *diag* *Eng Rec* 72:18-20 J1 3 '15
- Progress of the new Quebec bridge. *ll* *plan Engineer* 119:101-3 Ja 29 '15
- Progress on Hell Gate bridge, New York city. *ll* *Eng N* 74:236-7 J1 29 '15
- Quebec bridge work in 1915. *ll* *Eng N* 71:473-5 S 2 '15
- Recent cast-iron bridge decorations. *ll* *Eng N* 73:270-1 F 11 '15
- Record set for weight of steel erected in one day at Randall's Island on Hell Gate bridge approach. *ll* *Eng Rec* 71:390-400 Mr 27 '15

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- St. Louis municipal bridge east approach a steel viaduct nearly 3 miles long, diags Eng Rec 72:834-5 N 20 '15
- Steel arch bridge on curved gradient in the Bietsch valley, 11 diags Engineer 118:549-50 D 11 '14; Same cond. Eng M 48:750-1 F '15
- Steel bridge standards of the Iowa highway commission, J. F. Kelley, diags Eng Rec 70:631-2 D 12 '14
- Steel structural engineering, E. Marburg, Eng Rec 71:7-10 Ja 2 '15
- Three-mile approach viaduct, St. Louis municipal bridge, diag Eng N 74:154-5 N 2 '15
- Work on the new Quebec bridge during the first erection season, H. P. Borden, 11 Eng N 73:1-4 Ja 7 '15

Protection

- Gunite concrete encasement, diags Ry R 56:120-30 Ja 23 '15
- Protection of metal structures; with discussion, F. H. Ray, 11 diags Eng Soc W Pa 31:115-93 Mr '15; Excerpt, Ry R 57:154 J1 31 '15
- Waterproofing solid steel-floor bridges; abstract, S. T. Wagner, Eng & Contr 13:79-81 Ja 27 '15; diags Ry R 56:273-7 F 27 '15; Discussion, A. W. Carpenter, Ry R 56:557-8 Ap 24 '15

Bridges, Lift

- Design and erection of the Pennsylvania lift bridge no. 458 over the south branch of the Chicago river, W. L. Smith and W. W. Priest, 11 diags W Soc E J 20:478-500 My '15; Same, Ry R 56:519-28 Ap 17 '15; Same cond. Eng Rec 71:611-13 My 15 '15
- Direct-lift span provides 56-foot clearance over Louisville and Portland canal, 11 Eng Rec 72:199-200 Ag 14 '15
- Erecting a lever lift bridge, 11 Eng N 74:123-1 J1 15 '15
- Lift bridge constructed on 4 per cent. grade in Fairport, N. Y., C. R. Waters, 11 Eng N 73:705-6 Ap 15 '15
- Lift spans over Arkansas river designed for possible shifting of channel, 11 diags Eng Rec 72:567-70 N 27 '15
- Pacific highway interstate bridge over the Columbia river, E. E. Howard, diags Eng N 73:1218-21 Je 24 '15
- Pacific highway interstate bridge over the Columbia river and its approaches, E. E. Howard, diags Eng & Contr 13:519-3 Je 16 '15
- Special pier and floor design feature Pacific highway interstate bridge, diags Eng Rec 72:1-20 J1 3 '15
- Two large lift bridges at Chicago, diags Engineer 120:339-40 O 8 '15

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Bridges, Military. See Bridges, Bascule**Bridges, Movable. See Bridges, Bascule; Bridges, Lift; Drawbridges****Bridges, Pontoon. See Pontoon bridges****Bridges, Railroad**

- Allowing for impact in bridge calculations, J. L. W. Ball, diags Engineer 120:151-3 Ag 12 '15
- Bridge and building association, 25th annual convention, Ry Age 59:753-84 O 22 '15
- Bridge work of the C. M. & St. P. Ry, 11 plan Ry R 56:335-8 Mr 13 '15
- Building concrete trestles in the Platte river, J. H. Merriam, 11 diags Ry Age 59:383-6 Ag 27 '15
- Candian Pacific draw span over the Lachine canal, 11 Ry Age 59:230 Ag 6 '15
- Chart of equivalent uniform loads for railway bridges, D. R. Steinman, Eng N 73:780-2 Ap 23 '15
- Chesapeake & Ohio Northern railway bridge over the Ohio river at Scottdale, O., diags Eng & Contr 44:34-5 Ag 4 '15
- Completing the summit cut-off of the Lackawanna, 11 Ry Age 59:809-10 O 29 '15
- Concrete pier work on the Cumberland valley R. R. bridge over the Potomac, 11 Eng N 73:124-5 Ja 21 '15
- Concrete viaducts on the Pennsylvania railroad, D. A. Willey, 11 Sci Am N 79:24 Ja 9 '15
- Construction of the Gwynna Falls arch bridge, 11 diags Ry Age 57:1037-40 I 4 '14

- Construction of the Hallstead cut-off, D. L. & W. R. R.; Tunkhannock viaduct and Martin's Creek viaduct, 11 diags Ry R 56:143-8 Ja 30 '15
- Data on reinforced concrete railroad bridges and extent to which such bridges are used, diags plan Eng & Contr 13:29-32 Ja 13 '15
- Design and construction of the Langwies viaduct, Chur-Arosa, R. R., Langwies, Switzerland, A. M. Wolfe, 11 diags Concrete Con 6:239-45 My '15
- Design and erection of the Pennsylvania lift bridge no. 458 over the south branch of the Chicago river, W. L. Smith and W. W. Priest, 11 diags W Soc E J 20:478-500 My '15; Same, Ry R 56:519-28 Ap 17 '15; Same cond. Eng Rec 71:611-13 My 15 '15
- Design, construction and detailed costs of the Richellon river bridge, Lacelle Junction, Quebec, 11 diags Eng & Contr 42:512-6, 585-9 D 9, 23 '14
- Elastic curve applied to the design of the Scottdale bridge, D. R. Steinman, Eng Rec 72:258-60 Ag 28 '15
- Erecting railroad viaduct superstructure, 11 diags Eng Rec 70:668-70 D 19 '14
- Features of the Tunkhannock creek viaduct recently completed at Nicholson, Pa., 11 Eng & Contr 44:389-90 N 17 '15
- First French bridge built in war time, W. S. Hatt, 11 Ry Age 59:561-8 J1 21 '15
- Lake Erie & Eastern R. R.; concrete arch at Mahoning avenue, Youngstown, 11 plan map Ry R 57:132-7 J1 31 '15
- Long-span continuous truss bridge over the Ohio, diags Eng N 71:611-6 J1 8 '15
- Longest riveted simple trusses erected around old bridge by cantilever method at Pittsburgh, 11 diags Eng Rec 72:321 J1 17 '15
- Longest simple truss span in world to be erected over Ohio river at Metropola, diag Eng Rec 72:531 J1 10 '15; Abstract 1846 on steel for bridge construction, Eng M 19:913 S '15
- Lower Ganges bridge of the Eastern Bengal Ry, 11 Ry R 56:661-5 My 15 '15
- Metropola bridge over the Ohio river, diags Ry Age 59:160 J1 23 '15
- New bridge across the Missouri river at St. Joe, Mo., 11 diags Ry Age 59:131-6 J1 2 '15
- New bridge of the Chicago, Burlington & Quincy R. R. over the Missouri river at Kansas City, Mo., diag Eng & Contr 11:170 S 1 '15
- New bridge over the Thames river, N. Y., N. H. & H. R. R., Ry R 57:3 N 27 '15
- New R. R. & P. structure across Allegheny river at Riverside, N. Y., 11 diags Ry Age 58:815-6 Ap 16 '15
- New Canada-New England railroad link completed; Van Buren bridge route, maps Eng Rec 71:559 My 1 '15
- New concrete arch viaduct of the Philadelphia, Baltimore & Washington R. R. over Gwynna Falls, Baltimore, 11 plan map Ry R 56:346-8 Mr 13 '15
- Notable structures on the Spokane River cut-off, 11 diags Ry Age 59:623-6 Mr 19 '15
- Ohio river bridge for the C. M. & St. P. R. R., diag Eng N 73:270-2 J1 29 '15
- Ohio river bridge to contain longest riveted truss span in America, diags Eng Rec 71:799-806 Je 26 '15
- Overlands allowed in erecting railroad bridges, J. E. Grother, Eng Rec 72:357-8 J1 25 '15
- Pennsylvania's concrete bridge over the Susquehanna, diags Eng Rec 71:329 Mr 13 '15
- Reconstruction of a bridge on the Boston & Maine R. R., R. W. Lenzke, 11 diags Eng N 74:1067-9 I 2 '15
- Pontoon railroad bridge across the Panama canal, diags Ry R 56:821 Ja 16 '15
- Practical bridge erection and maintenance methods, 11 diags Ry Age 58:1057-82, 10317-51 My 21, 28 '15
- Rail-end connections for bascule bridges, 11 diags Eng N 73:1216-17 Ja 21 '15
- Rebuilding the Muskingum bridge near Coshocton, 11 diags Eng N 74:106-5 J1 10 '15
- Reinforced-concrete bridge with cantilever abutments; overhead crossing at Hallstead Pa., diags Eng Rec 70:622-3 I 5 '14

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- Replacing a large truss bridge by lateral movement. F. C. Bland and J. Miller. *Il Ry Age* 58:460-2 Mr 12 '15
- Solid deck trestles and bridges on the Illinois Central. *Il diags Ry Age* 59:279-30 Ag 13 '15
- Substructure for new Memphis bridge. M. B. Case. *Il Eng Rec* 71:518-20 Ap 21 '15; Same. *Ry Age* 58:877-81 Ap 23 '15; Same cond. *Ry* 58:554-6 Ap 24 '15; Same cond. *Eng N* 73:792-3 Ap 22 '15
- Track elevation at Lynn, Mass. C. B. Broed. *Il diags plans Eng N* 74:533-7 S 16 '15
- Tunkhannock viaduct nearing completion. *Il Eng Rec* 72:42-3 J1 10 '15
- Viaduct construction on the Kansas City terminal. A. R. Mitten. *Il diags Ry Age* 58:397-400 Mr 5 '15
- Wind stresses in railroad bridges. R. Fleming. *Eng N* 73:252-6 F 11 '15

See also Bridges, Bascule; Elevated railroads; Pontoon bridges; Railroads—Track elevation

Bridges, Rolling lift. See Bridges, Bascule**Bridges, Stone**

- Proposed centering for large-span stone bridges. H. Berg. *diags Engineer* 119:472-4, 521-3, 569-70 My 14, 28, Jo 11 '15

Bridges, Suspension

- Wooden suspension foot bridge. *Il Eng & Min J* 98:1000 D 5 '14

Bridges, Tubular

- Estimate for a tubular bridge for the Mexican Ry. *Eng N* 73:405 F 25 '15

Brightness

- Brightness-difference sensibility of the eye under various brightness of test-fields and surroundings. P. W. Cobb. *J Fr Inst* 180:235-7 Ag '15

- Efficiency of the eye under different conditions of lighting; the effect of varying the distribution factors and intensity. C. E. Ferree and G. Rand. *Il Illum Eng Soc* 10:407-47 no 6 '15

- Further experiments on the efficiency of the eye under different conditions of lighting. C. E. Ferree and G. Rand. *Il plan Illum Eng Soc* 10:448-501 no 6 '15

- Good and bad in recent lighting development. J. R. Cravath. *Il Elec W* 66:519-20 S 4 '15

- Methods of expressing brightness. J. R. Cravath. *Il Elec W* 64:1157-8 D 12 '14

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- Planning of lighting installations. R. F. Pierce. *Il Am Gas Light J* 103:331-2 N 23 '15

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- Rotational sensibilities related to illuminating engineering. P. C. Nutting. *J Fr Inst* 180:482-4 O '15

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Briquets

- Briquets as fuel for house heating boilers. D. T. Randall. *Il Metal Work* 83:847-9 Jo 11 '15

- British Portland cement making machinery; briquetting process. *Il diags Engineer* 120:148-51 Ag 13 '15

- Fuel briquetting. *Colliery* 36:45 Ag '15

- Recent developments in coal briquetting. C. T. Malcolmson. *Il Am Inst Min & Ind* 98:271-89 F '15; Discussion. 101:1143-7 My '15

Briquets (Iron)

- Briquettes in blast-furnace practice. M. Zullgen. *Iron Age* 94:1394-5 D 17 '14

Britannia

- Britannia linings for Hardinge mills. G. B. Collins. *Met & Chem Eng* 13:650-1 O 1 '15

Britannic (steamship)

- White Star liner Britannic. *Il Int Marine Eng* 19:556-9 D '14

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Angular venturi in Edwards. diag Automobile 33:240 N 18 '15
 Automatic carburetor for explosion motors. A. Krebs. diag Horseless Age 35:474-5 Ap 7 '15
 Balanced valve on new Stromberg. II diag Automobile 31:1175 D 24 '14
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 Car and carburetor design suitable for driving with any fuel. diag Automobile 33:238-91-1 Ag 12 '15
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 Features of Brown carburetor. Horseless Age 34:923 D 23 '14
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 Influence of the carburetor nozzle on the mixture proportion in liquid fuel motors. K. Hummel. diag Horseless Age 35:508-11, 552-5, 554-7, 618-20, 680-2 Ap 14-May 5, 10 '15
 Limit gauge for distance between an inside and an outside surface. diag Mach 21:493 F 15 '15
 Longmans carburetor now made in America. diag Automobile 33:386 Ag 20 '15
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Vacuum-velocity ratio not constant. A. B. Browne. II Automobile 31:1066-7 D 10 '14
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Carburization. See Case hardening**Card clothing**

Improved construction invented in Switzerland. diag Textile World 50:180-90 N '15

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Cardboard

Where waste newspapers go. Sci Am 111:471 D 5 '14

Carding machinery

Stripping mechanism for cards. diag Textile World 50:73 O '15

Carhouses. See Car houses**Caricatures and cartoons**

Truman Curtis, cartoonist. II. Hurley. II Inland Pr 56:24-6 O '15

Carlisle, Pennsylvania**Streets**

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Kirkhorn extension of the Carroll, Cincinnati & Ohio Ry. II Ry 11 56:239-42 F 20 '15

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Carpentry

See also Building; Cabinet making; Cars; Doors; Floors; Lathes; Railings; Roofs; Scaffolding; Slide rule; Woodworking machinery

Study and teaching

Training carpenters for the trade at Bridgeport. J. E. Johnson. II Am Ind 15:26-8 Mr '15

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See also Commerce; Demurrage; Express companies; Freight; Interstate commerce; Railroads; Shipping; Steamboat lines

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Bay State combination car. II diag Elec Ry J 46:854-7, 1058-73 O 23, N 27 '15
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- Cars at less than cost. N. W. Storer. *Elec Ry J* 46:635 *S* 25 '15
- Combination car for Kansas interurban line. *Elec Ry J* 46:806 *Ap* 24 '15
- Commissary car, Canadian Pacific railway. *Elec Ry J* 46:707-8 *D* 13 '14
- Curtain fixtures without pinch handles. *Elec Ry J* 46:298-9 *F* 8 '15
- Extensible trap door for passenger cars. *Elec Ry J* 46:116-17 *J* 17 '15; *Ry Ago* 59:207-8 *J* 30 '16; *Ry Ago* (Mech ed) 89:430-1 *Ag* '16; *Ry R* 57:288-9 *Ag* 28 '15
- Fireproofing wood for passenger car construction on British railways. *Ry R* 57:889 *N* 27 '15
- Improvements in Des Moines interurban cars. *Elec Ry J* 46:156-7 *J* 24 '15
- Making interurban cars comfortable. *diag* *Elec Ry J* 46:834 *O* 16 '15
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- New passenger car equipment Union Pacific R. R. *Elec Ry J* 46:195-6 *F* 6 '15
- Relative merits of long and short wheel base scale-testing cars. C. A. Briggs. *diag* *Ry R* 57:197-201 *Ag* 14 '15
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- Semi-steel cars in collision. C. G. Keen. *diag* *Elec Ry J* 46:715-16 *Ap* 10 '15
- Steel frame double truck caboose. *diag* plan *Ry Ago* (Mech ed) 89:301-4 *Ja* '15
- Steel frame passenger equipment with wood finish; new Grand Trunk suburban cars. *diag* *Ry Ago* 58:753-5 *Ap* 2 '15; *Same*. *Ry Ago* (Mech ed) 89:174-8 *Ap* '15
- To find maximum overhang of car on curve at platform. L. C. Jordan. *diag* *Ry R* 71:340 *Mr* 13 '15
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Bearings

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- Building concrete silos—unit construction with blocks and staves; with cost tables. C. D. Gilbert. II diag Concrete Cem 7:3-6, 37-8 JI '15
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- Construction plant and methods employed in building a system of concrete block tunnel sewers at Edmonton, Alberta. diag Eng & Contr 43:361-3 Ap 21 '15
- Good practice in concrete block house construction. Concrete Cem 6:305-8 Ja '15
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- Manufacture of hollow concrete block in the Canal Zone at the administration building. II Concrete Cem 6:176-80 Ap '15
- Regulation of concrete block manufacture and use. Concrete Cem 6:208-9 Ap '15
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- See also Concrete bricks

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- Equipment of a concrete brick plant in hospital broom shop. II. H. Jenks. II plan Concrete Cem 6:193-5 Ap '15
- Preliminary work in brick manufacture by patients in Norfolk state hospital. II. N. Jenks. II Concrete Cem 6:136 7 Mr '15

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- Coating disintegrated stone abutments with concrete. II Eng Rec 71:337-8 Mr 13 '15
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- Protection of metal structures. F. H. Fay. II diag Eng Soc W Va 31:132-66 Mr '15

Concrete columns. See Columns, Concrete**Concrete construction**

- American concrete institute; convention. Eng N 73:380-1 F 18 '15
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- Baltimore filters abound in useful hints on concrete construction and design. J. W. Armstrong. II plans Eng Rec 71:583-6 My 8 '15
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- Concrete and reinforced concrete in 1914. S. W. Thompson. Eng Rec 71:11-13 Ja 2 '15
- Concrete buildings in Mexico. Bldg Age 37:29-30 F '15
- Concrete construction on the New York state barge canal. G. C. Mills. II diag Concrete Cem 6:205-7 Ap '15
- Concrete mantle made with pre-cast units. II diag Concrete Cem 6:138 Mr '15
- Concrete mixing and placing. Ford building, Buffalo. II plan Eng N 74:1083-4 I 9 '15
- Concrete rings, superimposed, sunk to form San Antonio pump pit. W. W. Hay. II diag Eng Rec 71:741-3 Jo 12 '15

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- Concrete-unit building construction at Cedars Rapids. II diag Eng N 73:675-7 Ap 8 '15
- Concrete units for crib construction. M. D. Campbell. II Ity Age 58:476-7 Mr 12 '15
- Concrete warehouse on Brooklyn waterfront rapidly completed. T. A. Smith. II Eng Rec 71:298-9 Mr 6 '15
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- Constructing the Austin Nichols building in New York. II diag Eng & Contr 43:296-9 Mr 31 '15
- Construction details of bridge across Portland harbor. II diag Eng N 74:865-8 N 4 '15
- Construction management. S. B. Thompson and W. O. Lichtner. II diag W Soc 16 J 20: 109-20 F '15; Same cond. Eng & Contr 43: 428-32 My 12 '15; Discussion. W Soc 16 J 20: 129-51 F '15
- Construction of sanitary manure in dairy barn at Troy, Pa. II diag Concrete Cem 6: 104-6 F '15
- Design and construction of Massachusetts institute of technology buildings. S. B. Thompson. II diag plan Concrete Cem 7:14-19 J1 '15; Same. Eng & Contr 43:513-18 Je 9 '15; Same cond. Eng Rec 71:748-50 Je 12 '15
- Design and construction of Midland warehouse, Chicago. II diag plans Eng & Contr 44:182-4 S 8 '15
- Design and construction of the Chicago Ibbrow institute. II plans Eng & Contr 43:558-63 Je 23 '15
- Design and construction of the Gantner-Mattern co. knitting mill at San Francisco. R. F. Cykler. II diag Concrete Cem 6:273-7 Jo '15
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- Expansion measurements on a concrete factory building. S. C. Koon. Eng N 73:408 F 25 '15
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- First reinforced concrete arch in America. J. W. Pearl. diag Concrete Cem 7:75-6 Ag '15
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- Hoist for reinforcing-steel. II. DeCamara. diag Eng N 73:395 F 25 '15
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- Large saving in steel effected by new system of flat-slab reinforcement; Youth's companion building, Boston. II plans Eng Rec 72:450-2 O 9 '15
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- Methods and costs in constructing factory building at Houston, Texas. L. A. Hoynck. II diag Concrete Cem 6:559-63 F '15
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- Disastrous fire at Edison factory. *Il plan Eng Rec* 70:660-2 D '14
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- Casting concrete pipe out of doors in winter at Hamilton, Ontario. A. K. Macallum. *Il Concrete Cem* 7:174 N '15
- Cold weather construction methods used in erecting Hotel Traymore. D. L. Kneidler. *Il diag Concrete Cem* 7:172-4 N '15
- Concrete construction in the winter: heating the water, sand and gravel by steam and the enclosed work by stoves, salamanders, etc. H. H. Rice. *Il diag Ag* 37:34-6 F '15
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- Concrete warehouses on Brooklyn waterfront rapidly completed despite serious delays. T. A. Smith. *Il Eng Rec* 71:298-9 Mr '15
- Inexpensive bucket and hoist for concrete handling. R. H. Owen. *Il diag Concrete Cem* 6:267-8 My '15
- Large quick-dumping concrete car used at 46th street pier. *Il Eng Rec* 72:395 S '15
- Telpher charges concrete mixer direct from cars. *diag Eng Rec* 71:408-9 Mr '15
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- Wet concrete hauled from central plant on river. *Il Eng Rec* 71:469-70 Ap '15

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- Concrete block house, with double wall, which cost less than \$2,500. *Il plans Concrete Cem* 6:44-5 Ja '15
- Concrete block used in attractive and economical house construction at Mooseheart, Ill. *Il plans Concrete Cem* 6:15-16 Ja '15
- Concrete house with double walls. *Il plans diag Ag* 37:63-6 F '15
- Construction of small concrete houses at San Juan. P. R. K. Burton. *Il diag Concrete Cem* 7:100-3 S '15
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- Country house built of concrete. *Il diag plans diag Ag* 37:42-4 F '15
- Double-wall house construction with pre-cast wall, floor and roof units. *Il Concrete Cem* 6:20-8 Ja '15
- Engineer's concrete block cottage—built in Riverside, Cal., for \$3,000. H. R. Newman. *Il plans Concrete Cem* 6:20-1 Ja '15
- Houses with concrete walls and permanent interior form of hollow tile. C. E. Knapp. *Il diag plans Concrete Cem* 6:22-3 Ja '15
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- Price design in English farm cottage competition. *Il Concrete Cem* 6:218-19 Ap '15
- Six-room house, double concrete walls, costs complete, \$3,500. *Il plans Concrete Cem* 6:47-8 Ja '15

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Drainage, House

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Draughting room practice. See Drafting room practice**Drawbacks**

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- Automatic drawbridge signal. *diag* *Eng Rec* 70:690 D 19 '14
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See also Bridges, Bascule; Bridges, Lift

Drawing

See also Architectural drawing; Design, Decorative; Geometrical drawing; Mechanical drawing; Perspective; Topographical drawing

Drawing, Mechanical. *See* Mechanical drawing

Drawing, Topographical. *See* Topographical drawing

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Drawing room practice. *See* Drafting room practice

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